

10/512137  
DT01 Rec'd PCT/PTC 22 OCT 2004Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A coin configuration detection method that magnetically detects a configuration of a coin to identify a kind and/or authenticity of the coin, comprising:

~~characterized in that detecting~~ a magnetic flux change in a vicinity of a surface of the coin ~~is detected by using~~ a detection coil in which a coil central line ~~is extends~~ along the surface of the coin and a coil peripheral surface is locally opposed to the surface of the coin while an AC magnetic field along the surface of the coin is generated in an interior of the coin and/or in a surface space of the coin.

2. (Currently Amended) A coin identification sensor that magnetically detects a configuration of a coin to identify a kind and/or authenticity of the coin, comprising:

an exciting portion that generates an AC magnetic field along a surface of the coin in an interior of the coin and/or in a surface space of the coin; and

a detection coil ~~that is disposed so that a coil central line is extends~~ along the surface of the coin and a coil peripheral surface is locally opposed to the surface of the coin, ~~and the detection coil~~ detects a magnetic flux change in a vicinity of the surface of the coin.

3. (Currently Amended) ~~A-The~~ coin identification sensor according to Claim 2, ~~characterized in that wherein~~ the exciting portion is an exciting coil ~~being disposed so that a coil inner peripheral surface or a coil peripheral surface is along the surface of the coin and generating which generates~~ an AC magnetic field ~~in the direction~~ along the surface of the coin in the interior of the coin and/or in the surface space of the coin, and ~~that~~ the detection coil is disposed in ~~or in a vicinity of~~ an inner surface ~~peripheral~~ portion of the exciting coil ~~or in a~~

~~vicinity thereof, or disposed in or in a vicinity of a peripheral portion of the exciting coil or in a vicinity thereof.coil.~~

4. (Currently Amended) A The coin identification sensor according to Claim 2, characterized in that wherein the exciting portion has a plurality of coin adjacent portions, and is provided with a ferromagnetic core that forms a looped magnetic circuit with the interior and the surface space of the coin inside and an exciting coil that AC-excites the core and generates an AC magnetic field in the direction along the surface ~~of the coin~~ in the interior of the coin and/or in the surface space of the coin.

5. (Currently Amended) A The coin identification sensor according to ~~any of~~ Claims 2 to 4, Claim 2, characterized in that wherein the detection coil is a differential coil capable of detecting a differential voltage, and a pair of coils ~~constituting the~~ constitute a differential coil line along the surface of the coin.

6. (Currently Amended) A The coin identification sensor according to ~~any of~~ Claims 2 to 5, Claim 2, characterized in that the wherein a plurality of detection ~~coil~~ is coils are provided ~~in a plurality of numbers so as to~~ line along the surface of the coin.

7. (Currently Amended) A coin identification apparatus that identifies a kind and/or authenticity of a coin, characterized in that wherein a configuration of the coin is detected by the coin identification sensor according to ~~any of~~ Claims 2 to 6 Claim 2 and the kind and/or the authenticity of the coin is identified based on a detected configuration.

8. (New) The coin identification sensor according to Claim 3, wherein the detection coil is a differential coil capable of detecting a differential voltage, and a pair of coils constitute a differential coil line along the surface of the coin.

9. (New) The coin identification sensor according to Claim 4, wherein the detection coil is a differential coil capable of detecting a differential voltage, and a pair of coils constitute a differential coil line along the surface of the coin.

10. (New) The coin identification sensor according to Claim 3, wherein a plurality of detection coils are provided to line along the surface of the coin.

11. (New) The coin identification sensor according to Claim 4, wherein a plurality of detection coils are provided to line along the surface of the coin.

12. (New) The coin identification sensor according to Claim 5, wherein a plurality of detection coils are provided to line along the surface of the coin.

13. (New) The coin identification sensor according to Claim 8, wherein a plurality of detection coils are provided to line along the surface of the coin.

14. (New) The coin identification sensor according to Claim 9, wherein a plurality of detection coils are provided to line along the surface of the coin.

15. (New) A coin identification apparatus that identifies a kind and/or authenticity of a coin, wherein a configuration of the coin is detected by the coin identification sensor according to Claim 3 and the kind and/or the authenticity of the coin is identified based on a detected configuration.

16. (New) A coin identification apparatus that identifies a kind and/or authenticity of a coin, wherein a configuration of the coin is detected by the coin identification sensor according to Claim 4 and the kind and/or the authenticity of the coin is identified based on a detected configuration.

17. (New) A coin identification apparatus that identifies a kind and/or authenticity of a coin, wherein a configuration of the coin is detected by the coin identification sensor according to Claim 5 and the kind and/or the authenticity of the coin is identified based on a detected configuration.

18. (New) A coin identification apparatus that identifies a kind and/or authenticity of a coin, wherein a configuration of the coin is detected by the coin identification sensor

according to Claim 6 and the kind and/or the authenticity of the coin is identified based on a detected configuration.

19. (New) A coin identification apparatus that identifies a kind and/or authenticity of a coin, wherein a configuration of the coin is detected by the coin identification sensor according to Claim 13 and the kind and/or the authenticity of the coin is identified based on a detected configuration.

20. (New) A coin identification apparatus that identifies a kind and/or authenticity of a coin, wherein a configuration of the coin is detected by the coin identification sensor according to Claim 14 and the kind and/or the authenticity of the coin is identified based on a detected configuration.